



## MESSAGE FROM THE PRESIDENT

Despite a long winter for those of us in the Northern Hemisphere, it appears Spring is finally on the way; no doubt our Southern Hemisphere members are starting to see the first signs of Autumn. I think about this in terms of many of the birds we study. In my lab, we are currently monitoring the movements of a dozen Swainson's Hawks that we tagged with GPS transmitters on their breeding grounds in the panhandle of Texas. We monitored their southward migration last fall, and their movements on their wintering grounds in Argentina during the austral summer. We are now seeing they are heading back north: a sure sign to me that Spring is on the way. Intriguing to me is that these hawks will cross over as many as 15 different countries during each migration. I wonder how many threats they encounter on this passage. How many conservation issues directly relating to them are out there; how many we don't even know exist? Then I wonder, how many of those countries have personnel with raptor ecology and conservation expertise? How many members does the Raptor Research Foundation have in those countries? How can we improve the number? This, I believe is a challenge for us.

As of August 2014, the Raptor Research Foundation had 879 members. This is down from previous years, and is disappointing but not necessarily unexpected; almost all professional societies are experiencing similar decreases in membership. The relevant questions, however, are why is this happening and how do we reverse it? With our organization there are any number of possible explanations. For example, a reduction in funding for raptor research may translate to reduced numbers of new members due to fewer graduate students working on projects involving birds of prey. Alternatively, perhaps some members believe that, because they can get free journal contents through their university or employer, they do not need to become members or support the Raptor Research Foundation. Undoubtedly there are other reasons as well. As a foundation, we do not appear to experience a high turnover, with about an 86% retention rate of members. But, that means we have an annual rotating door on about 14% of our members; our numbers go down when those exiting members are not replaced. Much of this turnover is student membership. About 9% of our members are students, many of whom probably join RRF during their student years, but they may forgo membership after they graduate and are possibly no longer working directly with birds of prey.



Getting back to the issue of members across the globe. The Raptor Research Foundation is truly an international foundation, but the majority of our membership is from the United States (~71%), and many of the non USA members are from Canada and European countries. So, we have a three-fold challenge ahead of us. First, how do we attract members from other nations? Second, how do we attract student members, and retain them as they move into the professional ranks? Third, most importantly, how do we remain relevant to our membership? We provide a journal and newsletter, but that is not enough.



The RRF has a committee that addresses conservation issues as they are brought to our attention. This is critically important, as they draft letters and position statements on issues that are important to us, the leading international scientific society focused on research and conservation of birds of prey. The number of members in our foundation has relevance to the recipients of these letters. Our Early Career Raptor Researcher committee provides workshops at our annual meetings that are contemporarily relevant and well-attended. Our awards committee works hard to recognize professionals in our field, and to foster the next generation through various student awards.

This is but a sample of what your foundation, the RRF, does for raptor research and conservation. But, I believe, we can do more. The question I submit to you, the membership, is what can we do to increase our value and relevance to **YOU**? What are we doing that we can improve on? What are we not doing that we possibly could? I welcome your ideas and thoughts on this. Please, feel free to contact me or any of the officers and offer your input. We will compile suggestions and assess how we can improve as a foundation.

Happy Equinox to All,

*Clint Boal*

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**RAPTOR RESEARCH FOUNDATION, INC**  
**(Founded in 1966)**

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Editor-in-Chief, *Journal of Raptor Research*: Cheryl Dykstra  
Editor, *Wingspan*: Brian Washburn  
Website Coordinator: Libby Mojica

For more information about the Raptor Research Foundation, Inc. (founded in 1966), please visit the RRF website at: <http://www.raptorresearchfoundation.org/>.

Persons interested in birds of prey are invited to join the Raptor Research Foundation (RRF). *Wingspan* is emailed twice each year to all members of RRF and is available on the RRF website. Members also receive *The Journal of Raptor Research* (ISSN 0892-1016), which is published quarterly. For membership and subscription information, please contact: **Ornithological Societies of North America**, 5400 Bosque Boulevard, Suite 680, Waco, TX 76710, USA; 1-254-399-9636 (phone); 1-254-776-3767 (fax); [business@osnabirds.org](mailto:business@osnabirds.org) (email); <http://www.osnabirds.org> (web).

**Editor's Note** – Thanks to the following contributors for this issue of the *Wingspan*: **Karla Bloem, David Bird, Clint Boal, David Brandes, Jennifer Coulson, Kate Davis, Alan Fish, Aaron Haiman, Al Harmata, Jeff Lincer, Jody Millar, Gene Jacobs, Joan Morrison, Ellen Paul, Jemima Parry-Jones, Luis Tapia, and Susan Whaley.**

*Wingspan* welcomes contributions from RRF members and others interested in raptor biology and management. Please submit contributions via email to Brian Washburn, *Wingspan* Editor, at [rffwingspan@gmail.com](mailto:rffwingspan@gmail.com). For long contributions, please send as a MS Word attachment. If you are submitting photos, please include them within the Word doc with a caption and photo credit. Contribution deadline for the next issue is **15 August 2015**.

All issues of *Wingspan* and content guidelines are available at:

<http://www.raptorresearchfoundation.org/publications/wingspan-newsletter/online-newsletters-pdfs>



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## **Member Profile – Rob Bierregaard**

Submitted by Brian Washburn

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In an effort to continue introducing the amazing people in RRF, the Member Profile within this issue of *Wingspan* focuses on one of the most enthusiastic people I know, Dr. Richard (Rob) O. Bierregaard, Jr. Rob, we are indebted to you for all that you have done and continue to do for RRF, the science of raptor ecology, and the professionalism of raptor biologists. Thank you!

In 1971, when Rob began studying birds of prey on Martha's Vineyard, there were two pairs of Ospreys on the Island. Today, that population now numbers around 80 pairs, including breeders and "housekeepers". His studies of Ospreys focus on long-term monitoring of the Martha's Vineyard population and radio-tracking both adult and juveniles tagged at various locations from the Chesapeake Bay to northern New Hampshire. His website ([www.ospreytrax.com](http://www.ospreytrax.com)) is a stellar example of using cutting edge telemetry and geographic mapping technologies to provide a better understanding of long-distance migrants, such as Ospreys. Despite his "retirement" from the University of North Carolina at Charlotte, Rob is now a Research Associate of the Academy of Natural Sciences of Drexel University in Philadelphia, PA.

Aside from Osprey, Rob is also well-known for his work with Barred Owls in the central Piedmont of North Carolina. During 2001–2009, assisted by 3 graduate students and a small flock of undergrads, Rob studied Barred Owls in both suburban and rural habitats around the City of Charlotte, North Carolina. They found that Barred Owls are thriving in the city. Although these birds do suffer a relatively high rate of fatal encounters with cars, territorial vacancies are generally filled within a matter of weeks. A remarkable 300 pairs of Barred Owls live within 10 miles of downtown Charlotte.



**Rob releases Osprey "Artoo" with a new transmitter.**

Rob also works very hard to engage and prepare new generations of ornithologists. He taught Ornithology at the University of North Carolina at Charlotte from 1998 to 2011. In 2002, he began teaching an intensive field Ornithology course at the Highlands Biological Station in the Smokey Mountains of western North Carolina.

Rob has been a long-time member and supported of RRF. This past fall he was re-elected to the RRF Board of Directors. He frequently publishes in the *Journal of Raptor Research*, most notably as a driving force behind the recent (December 2014) Special Issue of the Journal devoted to the ecology and conservation of Ospreys world-wide.



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## **RAPTOR RESEARCH FOUNDATION 2015 ANNUAL CONFERENCE**

**4–8 November 2015  
Sacramento, California USA**

Block out November 4-8 for the 2015 Raptor Research Foundation conference in Sacramento, California! RRF 2015 will celebrate 50 years of raptor conservation with a special session on the ground-breaking Madison Peregrine Falcon meeting of 1965. Featured symposium topics will include: Raptors and Climate Change, Diseases and Toxics, Wind Farm impacts, and Golden Eagle biology – as well as general sessions. Our opening keynote speaker will be Dr. Peter Bloom, California's foremost raptor researcher, with more than four decades of field experience from all parts of the state, and with most of its raptor species.

Photo by Kris Vaneske



Photo by Eddie Bartley



### **RRF 2015**

The Raptor Research Foundation invites oral and poster abstracts for our annual scientific conference. The conference will be held at the Doubletree Hotel, a short distance from the riparian forests of the American River Parkway. The conference will be graciously hosted by the Golden Gate Raptor Observatory (GGRO), now celebrating 30 years of raptor migration monitoring in the Marin Headlands. Presentations on any aspect of raptor biology, ecology, research techniques, conservation, and management are invited.

Field trips are expected to the Sacramento Valley National Wildlife Refuge complex, to the Altamont Pass Wind Region, to the California Raptor Center at UC Davis, and to the Marin Headlands to see migrating raptors. Sacramento has an airport, but it is just a 2.5-hour drive from San Francisco, with close access to the oak-studded Sierra Foothills, to the waterbird-rich Central Valley, and to Condor Country.

Conference Information may be viewed at:

<http://www.raptorresearchfoundation.org/conferences/current-conference>

To offer ideas or financial support, for vendors, or for other information please contact the RRF 2015 local chair, Allen Fish at [afish@parksconservancy.org](mailto:afish@parksconservancy.org).



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## RRF 2015 CALL FOR PAPERS

The Raptor Research Foundation invites oral and poster abstracts for our annual scientific conference. The conference will be hosted by the Golden Gate Raptor Observatory, 4–8 November, 2015, in Sacramento, California, USA. Presentations on any aspect of raptor biology, ecology, research techniques, conservation, and management are invited.

### **Abstract submission:**

You may submit more than one abstract. Submit all abstracts via the conference website at: <http://www.raptorresearchfoundation.org/conferences/current-conference>.

Cover letters are not required. Failure to properly format abstracts may result in rejection or being returned to authors for reformatting.

The deadline for submission of papers is **30 June 2015**, concurrent with the deadline for symposia proposals, and with the deadline for extended abstracts for Andersen Award candidates (<http://www.raptorresearchfoundation.org/grants-and-awards/awards/william-c-andersen-memorial-award>). Authors of accepted abstracts will be notified via email by 31 August 2015. Andersen Award candidates will be further notified via email whether their papers will be included in the Andersen Award competitive oral session, in a general oral session, or in the Andersen poster competitive poster session. Prior to the conference, all authors will be provided with a follow-up email with links specifying the room, date and time of their presentations.

Questions regarding symposia and general abstracts should be directed to James Dwyer (Email: [jdwyer@edmlink.com](mailto:jdwyer@edmlink.com)).

Questions regarding Andersen Awards should be directed to Clint Boal at [clint.boal@ttu.edu](mailto:clint.boal@ttu.edu).

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## RRF 2015 CALL FOR SYMPOSIA

The Raptor Research Foundation invites symposia proposals for our annual scientific conference. The conference will be hosted by the Golden Gate Raptor Observatory, 4–8 November 2015, in Sacramento, California, USA. All proposals related to the science of raptors will be considered. The deadline for submission of symposium proposals is **30 June 2015**. Early submission is welcome and appreciated. Chairs of symposia selected for inclusion in the conference will be notified as submissions are received and approved.

Successful symposia at past RRF meetings have included species-specific and genera-specific foci, interactions of raptors with anthropogenic influences, and other topics of general interest to raptor ecologists. The 2015 meeting will include symposia on Golden Eagles (Jessi Brown et al.), Raptors and Climate Change (Jeff Lincer et al.), Raptors and Wind Energy (Rick Watson et al.), and Raptor Diseases (Michelle Hawkins and Miguel Saggese).

Symposium proposals should include:

- ✂ Symposium title for the RRF conference website.
- ✂ Name and contact information for symposium chair for the RRF conference website.
- ✂ A 3–5 sentence rationale for the symposium's topic for the RRF conference website.
- ✂ Names of authors the symposium chair has recruited to participate in the symposium, and general title or description of each author's oral presentation.



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Symposia must include at least 6 related papers, or enough papers to fill at least a half-day session. Symposia will run concurrent with general scientific sessions or other symposia. Prospective symposia chairs are encouraged to suggest symposia even if they have recruited fewer than the ideal number of speakers because related abstracts received through the general submission process can be used to complete symposia.

Questions should be directed to, and symposia proposals submitted to James Dwyer (Email: [jdwyer@edmlink.com](mailto:jdwyer@edmlink.com)).

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## News from the RRF

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### Frances and Frederick Hamerstrom Award

Submitted by Jennifer Coulson

Is there a colleague you admire who has made significant contributions to raptor ecology and natural history? If so, please consider nominating this person for the Frances and Frederick Hamerstrom Award. This prestigious award was established in 1990 to recognize and honor the Hamerstoms for their contributions to our understanding of raptor natural history and ecology through their long-term ecological studies. During their lifetime of research Fran and Hammi Hamerstrom authored and co-authored over 240 scientific papers, reviews and books.

This award has no restrictions, but membership in the RRF is encouraged. A list of recipients of the Hamerstrom Award can be found at the Raptor Research Foundation website ([www.raptorresearchfoundation.org](http://www.raptorresearchfoundation.org)). Nomination packets can be submitted at any time. Recipients will be announced at the annual meeting and on the Raptor Research Foundation website.

#### Nominations should include:

- ✂ Name, title, and address of the nominee.
- ✂ Name, title, and address of the nominator.
- ✂ Names, titles and addresses of four persons qualified to evaluate the nominee's scientific contribution.
- ✂ A brief summary of the nominee's scientific contribution.
- ✂ A complete list of publications authored by the nominee.

**Amount:** Non-monetary award

**Number of Awards Issued per Year:** 1-2

**Deadline:** June 30

#### To submit a nomination or obtain more information contact:

Jennifer O. Coulson, Orleans Audubon Society, 64340 Fogg Lane, Pearl River, LA 70452, USA  
Tel: (985) 863-8516; Email: [jacoulson@aol.com](mailto:jacoulson@aol.com)





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## **“Raptors and Climate Change” Symposium at RRF 2015**

Submitted by Jeff Lincer

We are happy to announce that the “Raptors and Climate Change” symposium will be held at the 2015 Raptor Research Foundation Meeting in Sacramento, California (specific symposium date and time TBA). As Stein et al. (2014) pointed out, “Climate change already is having significant impacts on the nation’s species and ecosystems, and these effects are projected to increase considerably over time. As a result, climate change is now a primary lens through which conservation and natural resource management must be viewed.”

The symposium objectives are: (1) understanding the complexities of how climate change is impacting raptors and the ecosystems upon which they depend, (2) sharing experimental approaches and analytical tools and (3) translating research findings into on-the-ground management. Both diurnal and nocturnal birds of prey will be included.

If you are interested in presenting a paper, can recommend someone who might be, would like to suggest additional topics, and/or would like to help with this symposium, please contact Jeff Lincer (see contact information below).

We want there to be widespread and diverse geographical and organizational involvement and support from as many agency, academic, private, and NGO sectors as possible; so if you have suggested contacts, or your organization would like to sponsor this symposium, please contact: Jeffrey L. Lincer, Symposium Organizer (Email: [JeffLincer@gmail.com](mailto:JeffLincer@gmail.com))

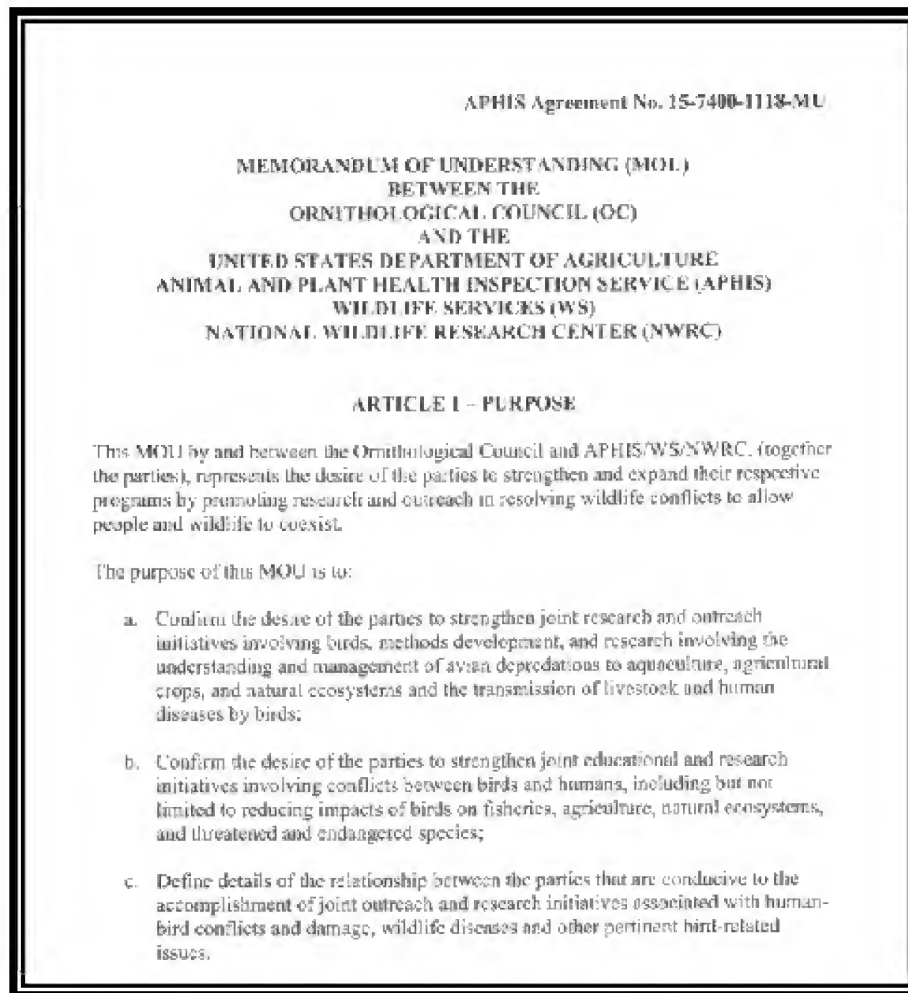
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## **New Memorandum of Understanding Between the Ornithological Council and USDA/APHIS/WS National Wildlife Research Center**

Submitted by Ellen Paul

In January, the USDA/APHIS/Wildlife Services National Wildlife Research Center and The Ornithological Council signed a Memorandum of Understanding (MOU) to promote and strengthen joint research and outreach activities related to bird damage management. Both groups support a better understanding of wild bird behavior and ecology, and efforts to manage bird damage to aquaculture, agricultural crops, and natural ecosystems, as well as the transmission of livestock and human diseases by birds.



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## **American Eagle Foundation Announces 2016 Grant Opportunities** Submitted by Jody Millar

The American Eagle Foundation (AEF) will be accepting grant proposals between July 1 and September 1, 2015 for work to be carried out in 2016 . AEF obtained funding for this grants program in 2004, when both the U.S. Senate and House unanimously passed the “Bald Eagle Commemorative Coin Act.” Congress authorized the U.S. Mint to mint gold, silver and clad coins, which they sold to the public in 2008. AEF continues to make those coins available to the public via its web site.

Sales from the U.S. Mint generated \$7.8 million in 2004, which Congress designated that AEF utilize for the benefit of bald eagles. AEF set aside 75% of these funds, or approximately \$5.8 million, to perpetually grow in the American Eagle Fund to provide competitive annual grants for bald eagle projects.

AEF utilizes a Bald Eagle Grant Advisory Team to numerically rate all grant applications. This team consists of some of the Nation's most outstanding eagle experts. For 2015, eight projects were awarded grants totaling \$100,038. Locations included Oregon, Colorado, Illinois, Florida, Georgia, Virginia, West Virginia, and Pennsylvania. Project scopes range from roost site database analysis to satellite tracking and nest site protection.

Additional information may be found at [www.eagles.org/grants](http://www.eagles.org/grants) or contact Jody Millar, AEF Grants Coordinator at [eaglegrants@gmail.com](mailto:eaglegrants@gmail.com). The AEF appreciates receiving pre-proposals so that we may provide assistance with project development, and/or gain awareness of the variety of projects to be submitted.

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## **Update on the Raptor Population Index (RPI) Project**

Submitted by David Brandes

The Raptor Population Index (RPI) project is a long-term effort of four organizations: the Hawk Migration Association of North America (HMANA), Hawk Mountain Sanctuary (HMS), HawkWatch International (HWI), and Bird Studies Canada (BSC). RPI is the mechanism by which data collected by citizen scientists and professional counters at migration monitoring sites throughout North America is used to inform resource managers, scientists, and the general public about the status of migratory raptor populations. Results were recently presented at the RRF conference in Corpus Christi, TX.

The RPI 2013 update is available on-line at <http://rpi-project.org/2013/>. Trends were calculated by BSC for over 50 sites and on 22 species of diurnal raptors. The sites used each had at least 10 years (2002–2012) of hourly data stored in [HawkCount.org](http://HawkCount.org).

It is quite possible that migratory behavior and/or migration patterns for some species are changing in response to climate change and other factors. We are exploring ways that other datasets, such as Christmas Bird Count data, can help to inform interpretation of trends we see in annual migration counts. The next update is scheduled for 2015.

Some highlights of the update include the following:

- ✂ American Kestrel counts continue to decline at many western sites, but have stabilized somewhat in the east.
- ✂ Golden Eagle counts over the past 20 years show strong downward trends in the west and upward trends in the east, but have stabilized over the past 10 years.

- ✂ Black Vulture, Turkey Vulture, Bald Eagle, Mississippi Kite, and Peregrine Falcon counts continue to increase.
- ✂ In the east, a number of species (Northern Harrier, Northern Goshawk, Cooper's Hawk, Red-tailed Hawk, Red-shouldered Hawk, Rough-legged Hawk) show mixed results, mostly decreasing. This may be due in part to changes in migratory behavior.
- ✂ In the west, there have been decreases across many species over the past 20 years, which may be in part due to drought conditions that prevailed during the past decade. However, over the past 10 years, counts are flat in all species except American Kestrel and Prairie Falcon (mixed results with some decreases).
- ✂ At Cardel, MX, our only 20-year site in the Gulf Region, counts of all species including the mega-flocking long-distance migrants are stable, with the exception of increases in Mississippi Kites, Zone-tailed Hawks, and Gray Hawks.

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### **Update from the International Centre for Birds of Prey** Submitted by Jemima Parry-Jones

After many years of thinking about it and worrying, as it is a huge leap of faith for me personally, the International Centre for Birds of Prey at Newent in Gloucestershire has become a charity. This should make a big difference to us as it means we can apply for grants, we can accept donations and hopefully people will put us in their Wills as a legacy to carry on the work that we have been doing for 48 years this year. It will also make a difference to us in terms of tax. We have lots of plans that I hope will come to fruition in the next few years.

As well as the conservation work we do in India and Nepal with the vulture crisis, the education work that we do at our base in Newent, the captive breeding and the research, we also accept injured wild raptors and have done so for over 40 years. The new hospital building has made a huge difference to us. Apart from making a significant improvement to our lives and the birds because the facilities are really nice to work with, it has also made a difference in how long we can treat the birds and because of it I am delighted to say that we have managed to get probably 50% more birds back to the wild than in previous years.



**Young Verreaux's  
Eagle (*Aquila  
verreauxii*) bred  
at ICBP in 2014**





**Wild young tiercel back with  
mum after ten days away**

One recent late spring we had an influx of young birds that had fledged too early, possibly because of hot weather and nest sites getting too warm. One was a Peregrine from a church in Bath, he was here for ten days and once he could fly we took a calculated risk and sent him back to his nest, which was accessible, on day eleven away from his parents. He flew off, but the following day was back on the building and his mother was feeding him. I was pleased but not surprised because I was pretty sure that the bond with young and parents was strong enough to withstand ten days of him being missing.

I had a phone call of a similar ilk from another rehabilitation Centre last year. A female Eurasian Kestrel had been brought in with severe wing injuries, she had young in an accessible nest box that

were brought in as well and the people wanted to know the best way to go forward. So we suggested putting the injured female (after treatment) in a large hospital box and putting the chicks with her. She took them and reared them in that situation which was amazing. Orphan birds of prey (and other species) are a large part of the work that rehabilitators do, orphan is of course the wrong word as most are not orphaned, but just either found by well-meaning humans and often mistakenly 'rescued' or they are lost or have injuries. They are in some ways the hardest to get rehabilitated because they have no parents to teach them to hunt, so it is good to know that it may be possible to get away with putting young back in or close to nests quite some time after they have been delivered to a rehabilitation centre and this of course gives them a much higher chance of survival in the long term.

I am delighted to be able to report that the work in India and Nepal is going extremely well. The trial of putting back the first clutch (just one chick per bird) with the parents in the colony aviaries went ahead in February last year. It was a first because in a large enclosure with over 30 individual birds and probably six nesting pairs, going in and taking eggs and replacing with chicks has an element of risk. Flushing the birds from their nest, potentially the wrong bird going back on the nest and other non-predictable problems, all could be difficult, however it went superbly, most of the parent birds were back on the nest and almost immediately covering the nestling before we even got out of the enclosures. Many of the parents stayed close to the nest while we did the exchanges, one would not allow it. The second clutch of eggs was then incubated artificially as we manage the first clutch, and we were able to determine fertility, hatchability and success rates for second clutches. Instead of just producing one extra chick by allowing the all parents to care for the second clutch, we produced seven extra birds, with the



**Vulture Colony Aviary in India**



parents rearing their first clutch successfully. So it proved to be a worthwhile trip all in all. This year we intend following the same procedures. We are now looking at the first releases as the next big task. Sadly, for me anyway, Dr. Ian Newton has stepped down as the Chair of SAVE, having done one extra year. The good news is that Dr. David Houston is taking his place.

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## **Raptor News**

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### **Swallow-tailed Kite Conservation Alliance Meeting Focused on Habitat Management Guidelines and Population Monitoring**

Submitted by Jennifer Coulson

The Swallow-tailed Kite Conservation Alliance (SKCA) met during 16–18 September 2014, at the rustic Charlie Elliott Wildlife Center in Mansfield, Georgia. Wildlife biologists and managers from state, federal, non-profit organizations and the timber industry discussed management, research, monitoring, outreach, and priority needs. It was encouraging to have so many professionals with a wide diversity of expertise assembled to support kite conservation.

Meeting topics included: habitat modeling, predation, urbanization, best management practices, protecting the large roosts in Florida, conservation partnerships and the importance of managing kites on timber industry and private lands. The group brainstormed about producing habitat management recommendations for the timber industry, public lands managers, foresters and private landowners. Another focus of the meeting was evaluating results of a recent range-wide population survey. The effort that went into this survey was remarkable: for three to four survey dates in late July, over three consecutive years, aerial surveys of pre-migration roosts were conducted in early morning across seven states: South Carolina, Georgia, Florida, Alabama, Mississippi, Louisiana, and Texas. By doing simultaneous counts in consecutive years, biologists hope to obtain a better estimate of the U.S. population size and develop a population index useful for periodic monitoring. A final estimate of the number of kites counted over the northern subspecies' entire summer/breeding range and recommendations for future survey approaches will be available in the final report. Project funding was provided by the U.S. Fish and Wildlife Service with matching support from the cooperating partners [Avian Research and Conservation Institute (Florida), South Carolina Chapter of The Nature Conservancy, Georgia Department of Natural Resources, Alabama Department of Conservation and Natural Resources, and Orleans Audubon Society (Louisiana), Louisiana Department of Wildlife and Fisheries, Mississippi Museum of Natural Science–Mississippi Department of Wildlife, Fisheries and Parks]. With our increased knowledge of the species' numbers and distribution, partners can better define the Swallow-tailed Kite's conservation needs in the U.S.

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## **The Peregrine Fund**

Submitted by Susan Whaley

### **Two of three wild-hatched condors fledge and join Arizona-Utah flock**

Biologists from The Peregrine Fund and Zion National Park confirmed that two California condor chicks left their nests and took flight in northern Arizona, but hopes of a third chick successfully reaching the fledgling milestone in southern Utah were dashed by a lack of visual observation. The third chick was Utah's first wild-hatched condor chick. Observations of the condor parents visiting the Utah nest cave suggested all was going well during the six months leading up to fledging, but by late November, a month after the predicted fledge date, biologists noted that something was wrong. The Utah chick quit coming out to the cave opening, and soon after, the parents decreased their visitation to the cave. After multiple trips to investigate, biologists concluded that the chick had not survived.

### **Director of condor field operations awarded Wilburforce Fellowship in Conservation Science**

Chris Parish, who leads The Peregrine Fund's condor recovery project in Arizona and Utah, has been awarded a Wilburforce Fellowship in Conservation Science. The goal of the program is to create a community of leaders in conservation science to address environmental problems in western North America. Parish is one of 20 Fellows who will participate in the yearlong program, which aims to promote collaboration and collective action across several disciplines, geographies, and affiliations. Each Fellow will set a goal on a specific issue and a team of trainers and mentors will help them use communication and leadership skills to reach that goal. Parish also will meet with experts who specialize in planning strategic actions and building networks.

### **The Peregrine Fund launches new photo exhibition, "Raptors at Risk"**

The Peregrine Fund is seeking photographs featuring the majestic beauty and precarious circumstances of birds of prey around the world for its new juried photo exhibition. Entries will be accepted May 1 and winners will be announced July 11. The theme, "Raptors at Risk," offers professional and amateur photographers an opportunity to draw worldwide attention to eagles, hawks, falcons, and other often-misunderstood birds of prey. The exhibition is sanctioned by The Photographic Society of America and will operate under the new 2015 international Nature Division rules that reward story-telling content as well as pictorial quality. Winning images will be displayed at the World Center for Birds of Prey in Boise, Idaho, and may be featured in the 2016 calendar.

## Vulture study in Uganda summarizes how survey methods should be standardized

Six of the eight vulture species that occur in East Africa are listed as globally threatened. Since their current distributions individually span up to 39 range states, there is a pressing need to develop robust, standardized methods that provide a clear measure of range-wide changes in abundance. Yet, survey methods currently used tend to yield either of two measures: estimates of breeding density, derived mainly from nest counts; or linear encounter rates, derived from road surveys. A paper co-authored by Munir Virani and Darcy Ogada of The Peregrine Fund's Africa program presents the results of a six-year survey of six vulture species in Uganda, in which road counts were used, in combination with distance sampling, to determine both encounter rates and densities within protected areas and in predominantly pastoral and agricultural areas. The study was published in December by Bird Conservation International.



World Center for Birds of Prey  
5668 W. Flying Hawk Lane  
Boise, ID 83709

### NEWS RELEASE For immediate release February 10, 2015

#### CONTACT

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[www.peregrinefund.org](http://www.peregrinefund.org)

### The Peregrine Fund launches its first juried international photography exhibition, "Raptors at Risk"

BOISE, Idaho – The Peregrine Fund is seeking photographs featuring the majestic beauty and precarious circumstances of birds of prey around the world for its new juried photo exhibition. Entries will be accepted May 1 and winners will be announced July 11.

The theme, "Raptors at Risk," offers professional and amateur photographers an opportunity to draw worldwide attention to the true life stories of eagles, hawks, falcons, and other often-misunderstood birds of prey.

The exhibition is sanctioned by The Photographic Society of America, the only organization in the United States and one of only four in the world authorized to oversee the work of accomplished photographers. It will operate under the new 2015 international Nature Division rules that reward the story-telling content of a photograph as well as the pictorial quality. Organizers expect these rules to attract birders, naturalists, and nature and wildlife photographers.

"The Nature rules encourage amateur photographers with access to true wildlife situations faced by birds of prey to compete with the more polished entries of advanced photographers," said Amy Siedenstrang, art director for The Peregrine Fund.

Entries will be judged by a panel of expert outdoor and wildlife photographers. The winners will receive PSA gold, silver, and bronze medals, Honorable Mention ribbons, and The Peregrine Fund's own Raptors at Risk Award along with prizes from sponsors, including Vortex Optics and B&H Photo.

Rules and more information is available online: <http://www.peregrinefund.org/raptors-at-risk>

A catalog of all entries will be published online. The winning entries and other selected images will be displayed in the visitor center at The Peregrine Fund's World Center for Birds of Prey in Boise, Idaho. If they choose, entrants also can compete to have their images selected for the organization's

## Decline of Montagu's Harrier (*Circus pygargus*) Population in Galicia (Northwestern Spain)

Submitted by Luis Tapia, Alberto Gil-Carrera,  
and Xabier Vázquez-Pumariño

A monitoring campaign on several populations of diurnal raptors in Galicia (NW Spain) has been carried out during the last breeding season (May–July 2014), observing a decrease in the presence and abundance of species associated to open habitats, such as Montagu's Harrier (*Circus pygargus*). This migratory raptor is considered a "Vulnerable" species in Galicia, and a decrease of abundance up to 50% has been estimated. This species, which in NW of the Iberian peninsula presents a high percentage of melanism (up to 50%), usually breeds in natural shrubs. The forest management policies currently implemented in Galicia are mainly focused on the production of low-quality wood, misregarding other natural values, such as conservation of biodiversity.

The main threat related to this policy is the destruction of scrublands – the preferred habitats for breeding and hunting for a number of raptors – that, together with the abandonment of the traditional land management practices, could be behind the declining trend observed for this species. Given the decline detected, it is required to update the conservation status of this



**Melanic male Montagu's Harrier  
(*Circus pygargus*)**



**Forestry destroying montane  
heathlands in Galicia (NW Spain)**

species from "Vulnerable", as registered in both the IUCN and the Galician list of threatened species, to "Endangered". Monitoring of endangered species, an essential tool to address the evolution of such species and to control further environmental degradation, must be a priority for the Galician Administration, which should also implement proper conservation plans to protect threatened species and comply with the current environmental legislation.

Questions can be directed to Luis Tapia (Email: [luis.tapia@usc.es](mailto:luis.tapia@usc.es)).

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## **A Report on Nest Censuses of Raptorial Birds Using Rotary-Winged Unmanned Aerial Systems (AKA Drones) and Behavioural Responses of the Adult Birds**

Submitted by James Junda, David Bird, and Erick Greene

The overall aim of this research is to not only demonstrate the effectiveness of using rotary-winged Unmanned Aerial Systems (UAS) to census raptor nests, but more important, to document the nest defense behavior of the adult birds to the machine. A total of 113 UAV flight surveys of the nest contents of four raptor species: Osprey (*Pandion haliaetus*) in Montana, USA, 2013 as well as Bald Eagle (*Haliaeetus leucocephalus*), Ferruginous Hawk (*Buteo regalis*) and Red-tailed Hawk (*Buteo jamaicensis*) were conducted in Saskatchewan, Canada in 2014. With a success rate of over 90%, this technique has been shown to be applicable and useful in a variety of nesting situations. Each survey was conducted using a small GoPro camera attached to a sub-3 kg rotary-winged Draganflyer X4 drone. In the vast majority of trials, high-quality images of the nest contents were obtained, allowing for an accurate count of eggs or nestlings, as well as useful estimates of the nestling ages. Flight times were brief, lasting less than five minutes, with the majority lasting less than two minutes and the duration decreasing as pilot skill increased. We measured the parental response at each nest, recording key behaviors such as initial flush distances, call rates, flight behavior and dives. A large variation in parental nest defense response between species was observed. In general, we found Osprey to be the most aggressive, the two buteos to be the least aggressive, and Bald Eagles somewhere in the middle. The latter species was highly interested in the UAV but never actually attacked it. We also measured variation within the nesting cycle, conducting 86 UAV nest surveys of Osprey and comparing parental nest defense response between egg stage and nestling stage. Finally, we approached active nests on foot without flying the aircraft, but still recording parental behavior. This allowed us to sort out the amount of disturbance caused specifically by the drone versus only human presence at the nest site.

We have thus far demonstrated that drone aircraft can be a valuable tool for monitoring raptor nests, allowing for a flexible schedule of quick checks and less disturbance than current survey methods, while proving safer and more accurate than using light manned aircraft. A draft manuscript on the best procedures for using UAS for this purpose is available to anyone interesting in using this technology. One must keep in mind that flying such machines can only be done with appropriate permits and we encourage anyone adopting this technology to ensure that they have proper documentation from their respective government authorities.

Over the coming years, the intention is to continue flying various models of quadrotor UAVs over the nests of a wide variety of raptorial bird species to determine which machines and which species best lend themselves to this type of censusing technology, as well as developing ways to ensure the safety of both the UAV and the nesting birds. Collaboration is always welcomed.



This research would not have been possible without the support of the Kenneth Molson Foundation, the Animal Welfare Institute, International Osprey Foundation, Bird Protection Quebec, Draganfly Innovations, Ltd., Canadian Wildlife Service, Transport Canada, Saskatchewan Ministry of Environment, Dan Zazelenchuk, Jon Gerrard, Frederick Letourneux, Marianna Dimauro, Heiko Langer, Dominique Chabot, Charla Patterson, and a host of landowners in Montana and Saskatchewan.

**\*\*\* EDITOR'S NOTE:** This report provides a very timely update on the value of using unmanned aerial vehicles (UAVs) for scientific research. Due to serious safety issues, the regulatory agency in the USA (the Federal Aviation Administration) is currently revising the rules pertaining to the use of UAVs in the nation's airspace. Anyone wishing to use this very promising technology should thoroughly research the regulations and obtain the necessary permits and/or waivers BEFORE attempting to use the equipment.

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## World Owl Hall of Fame 2015 Awards

Submitted by Karla Bloem

The World Owl Hall of Fame is presenting five awards in 2015 to individuals from Japan, The Netherlands, Italy, and the U.S.A.

**Don** the Blakiston's Fish Owl is receiving the Lady Gray'l Award for owls. Don was the first of her rare species to be hatched in an incubator, and she herself has now hatched abandoned wild eggs. Don also serves as an ambassador for her species to government officials shaping forest conservation policy.

**Dr. Karel Voous** from The Netherlands is probably best remembered for his classic book "Owls of the Northern Hemisphere." American **Dr. Carl Marti** worked with many owl species, but is best known for his extensive work on the Barn Owl. Both will posthumously be receiving the Champion of Owls Award for their lifetimes of work with owls.

Italian **Marco Mastrorilli** is the county's lead owl researcher and created the Festival dei Gufi (Italian Owl Festival) which last year attracted 25,000 visitors. Americans **Sam and Bob Fox** together with **Greg Clark** founded Wild at Heart in Arizona. As a team they work with Burrowing Owl relocation, breeding the endangered Cactus Ferruginous Pygmy-Owl, and are leaders in captive owl care methods. All will receive the Hall of Fame's Special Achievement Awards.

The World Owl Hall of Fame awards are presented by the International Owl Center at its annual International Festival of Owls the first weekend in March each year. For more information about the awards, winners, judges, and sponsors, visit <http://www.festivalofowls.com/halloffame.html>.

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## Northern Harrier Practice Hunting

Submitted by Aaron N. K. Haiman

I was walking along the edge of a plowed field along the Clarksberg Branchline Trail in West Sacramento, California 18 November 2014 at about 07:15 PST when I saw a hatching-year Northern Harrier (*Circus cyaneus*) quartering back and forth, low over the ploughed earth. The raptor was not very far from the edge of the field where I stood, so I was able to get a really great view as I watched it coursing along and staring at the ground intently as it hunted for its breakfast. Suddenly, it made a sharp turn, almost flipping over itself, and dove for the ground. It landed on something and after a moment standing on the ground, it took off. As it did so, I saw a small, brown object in its talons. I assumed at first that it was a small mammal, and that the harrier had made a successful hunt, but when the bird was approximately 8 meters off the ground, it dropped the brown object. As this item fell back to the earth, I was able to see that it was not an animal at all, but was actually a clod of dirt.

What had happened here? Did the Harrier make a mistake and attack a mouse-shaped bit of dirt thinking that it was, in fact, the makings of a meal? Given how keen the eyesight of raptors is, this seems unlikely. And it seems especially unlikely given that the bird was only approximately 8 to 10 meters off the ground when it started the dive. Making that big a mistake at that close a range is hard to believe. So what was the hawk doing? Was it practicing? This was a young harrier.

Perhaps, not seeing any actual voles or mice at that moment, it decided to do a little target practice. Young songbirds need to practice their song, and often sound amusingly bad at first. However, over the course of a few weeks, they practice and hone their vocal abilities and end up producing songs that sound like the other adults of the species. So, I believe the idea of raptors practicing their hunting skills seems pretty understandable. The amount of skill required to be a predator is rather impressive, and even when you consider that many of these skills are hard-wired instinct, that still leaves a lot of room for learning and improvement: practice. Here was a raptor that, perhaps, just picked a particular earth clod on the ground and wanted to see if it could hit it at high speed, just to see if it could. And it did; practice does make perfect!



© Eddie Bartley

A pair of Northern Harriers (*Circus cyaneus*)

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## **A Notable Golden Eagle Encounter**

Submitted by Al Harmata and Marco Restani

On 4 December 2014, residents reported an eagle that could not quite get airborne near Flathead Pass, Gallatin County, Montana (45.973° -111.057°) to the Montana Raptor Conservation Center (MRCC), a local raptor rehabilitation group (<http://montanaraptor.org>). Later that day, MRCC personnel retrieved the adult Golden Eagle (*Aquila chrysaetos*), which had no visible impediments to flight other than icing on plumage and the burden of a full crop. Notable morphologic characteristics included ashen gray-to very pale yellow feet (normally bright to pale yellow) and pale wheat/brown iris with brown iris “spokes” (see photo), normally deep sepia to brown speckled wheat. The eagle wore a rivet aluminum band # 0629-32544. We banded the eagle as an SY male near Ringling, Meagher County, Montana (46.242° -110.774°) on 30 March 1992, making the eagle at least 23 years 7 months old (est. hatch date in April 1991). At banding, the eagle’s mass was 3,400 g (empty crop). The encounter location was 37 km and 216° from the banding site. Blood tests completed by MRCC indicated a blood lead level of 10 µg/dL, well within “background” limits (0-20 µg/dL). The bird’s mass was 3,760 g after passing the crop. After a week of observation in MRCC’s large flight barn, we tagged the eagle with a tail-mounted, satellite tracked transmitter and released him at the encounter location on 14 December 2014. He is currently (~11 Feb 2015) being tracked and appears to be moving normally, remaining in the general area of the encounter. It is likely, having not been encountered and sustained by a full crop, the eagle would have survived after preening ice from its flight feathers; it was perched on a fence post when retrieved. There are two recoveries of Golden Eagles over 30 years old and four encounters of Golden Eagles in their 20s (U.S.G.S. BBL data). Only one 20 year old was released alive, presumably post-rehabilitation. Since 1960, 8.6% of nearly 12,000 Golden Eagles banded in North America have been encountered (U.S.G.S. BBL data), but only about 1 in 2,000 banded (1 in 170 encountered) were over 20 years old.



**Adult Golden Eagle (*Aquila chrysaetos*)  
encountered almost 24 years after it was banded.**

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## Upcoming Conferences

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### RRF 2015

**4–8 November 2015  
Sacramento, California, USA**

Make sure to save the week of 4–8 November 2015 for the Raptor Research Foundation Conference in Sacramento, California! The conference will be at the Double Tree hotel and hosted by the Golden Gate Raptor Observatory. Plan on attending – it's the 50<sup>th</sup> anniversary of the Madison Peregrine Conference! Contact **Kate Davis** ([raptors@montana.com](mailto:raptors@montana.com)) to lend a hand.



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## ANNOUNCEMENTS and BRIEF NEWS ITEMS

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### For Sale

**RRF Publications, Pins, and Decals** – Hard copies of *The Journal of Raptor Research* (Vol. 1-30), most Raptor Research Reports, and RRF pins and decals may be purchased directly from RRF (Angela Matz, 101 12th Ave., Room 110, Fairbanks, AK 99701, USA; email: [angela\\_matz@fws.gov](mailto:angela_matz@fws.gov)). See <http://raptorresearchfoundation.org/publications/journal-of-raptor-research/back-issues> for details and prices. Orders for 4 or more issues receive a 30% discount. Hard copies of *The Journal of Raptor Research* (Vol. 31+) may be purchased from Ornithological Societies of North America (5400 Bosque Blvd, Suite 680, Waco, TX 76710, USA; phone: 1-254-399-9636; email: [business@osnabirds.org](mailto:business@osnabirds.org); web: <http://www.osnabirds.org>). Some older issues are not available in hardcopy; but all issues from Vol. 1-39 are available on SORA (<http://elibrary.unm.edu/sora/jrr/>) for free download.

## **Announcements**

### **Raptor Workshop: Accredited through University of Wisconsin - Stevens Point**

Attend this 5-day introductory level field course designed to instruct students in a full-range of the latest field techniques used to study raptors. "Introduction to Raptor Field Techniques" will be held in Stevens Point, WI by Eugene Jacobs of the Linwood Springs Research Station. Summer Session: **15-19 June 2015**. Receive first-hand experience working with: live raptors, capturing, handling, banding techniques, broadcast call surveys, tree climbing, rappelling, blood sampling and more. Cost is \$450 and space is limited, so register early. For more information visit <http://raptorservices.rezgo.com>.

### **Red-tailed Hawk Blood Samples**

Available: 20+ blood samples taken from Red-tailed Hawks in and around Hartford, CT. Most samples are from known resident hawks (territorial adults and juveniles) but some may be from northeastern migrants. If these samples could be useful for a genetics study of this species, or of Buteos, in general, please contact Dr. Joan Morrison (Email: [joan.morrison@trincoll.edu](mailto:joan.morrison@trincoll.edu) or Tel: (860) 297-4120).



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